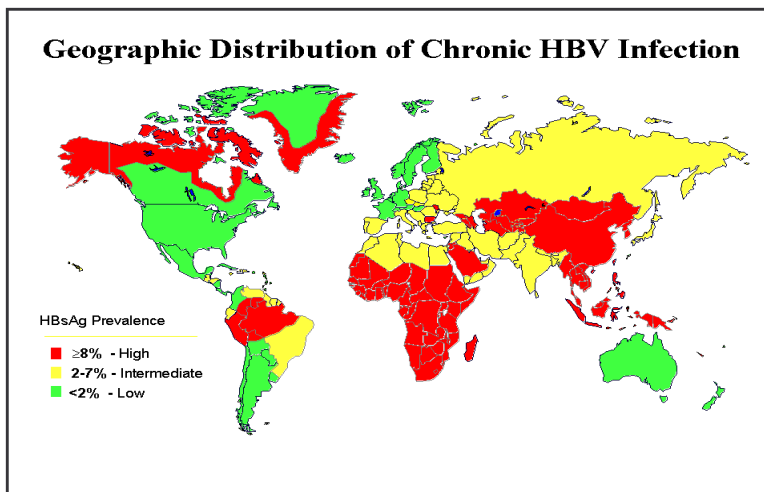


# *epi* TRENDS

A Monthly Bulletin on Epidemiology and Public Health Practice in Washington State

## Perinatal Hepatitis B is Reportable as an Acute Condition

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Infections with hepatitis B virus (HBV) are a major health problem globally, including in the United States. Although acute hepatitis B infections are rarely fatal, chronic infection can occur with long term risk of death from complications of liver damage or liver cancer. Persons with new or chronic infections can transmit the virus through body fluids such as through sexual contact or sharing contaminated needles. Hepatitis B is also a maternal child health issue because the virus can be transmitted to the newborn from an infected woman.

### Hepatitis B and Pregnancy

When a pregnant woman is hepatitis B surface antigen (HBsAg) positive, through acute or chronic hepatitis B virus infection, her child can be exposed in utero or at the time of delivery. It is estimated that 20,000 hepatitis B infected mothers give birth each year in the United States, and these babies are at risk of becoming infected at birth or during the first five years of life. Without intervention, up to 90% of infants born to HBsAg-positive women become infected; among persons chronically infected at birth, 25% will die from liver cancer or cirrhosis. The good news is that these infections can be prevented by providing a newborn with post-partum prophylaxis. With timely and proper use, hepatitis B immune globulin (HBIG) and hepatitis B vaccine are 90% effective in preventing perinatal hepatitis B infections.

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*epi*TRENDS  
P.O. Box 47812  
Olympia, WA 98504-7812  
Mary C. Selecky  
Secretary  
Maxine Hayes, MD, MPH  
State Health Officer  
Jo Hofmann, MD  
State Epidemiologist for  
Communicable Diseases  
Deborah Todd, RN, MPH  
Managing Editor  
Marcia J. Goldoft, MD, MPH  
Scientific Editor

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The key recommendation ensuring that infants born to HBsAg-positive women receive prompt and appropriate preventive treatment is screening pregnant women for HBsAg in **each** pregnancy, not just the first. That is why Washington designated being pregnant when HBsAg-positive a notifiable condition, reportable to the local health jurisdiction and routed to the coordinator of the jurisdiction's Perinatal Hepatitis B Prevention Program (PHBPP). The pregnant woman will be contacted and enrolled in the program to assure that her high risk infant receives both HBIG and the first dose of vaccine within 12 hours of birth (or before leaving the hospital) as well as receiving the second and third doses of vaccine on time at age 1-2 months and promptly after reaching age 24 weeks.

Once a high-risk infant completes the three dose vaccine series, post-vaccination serologic testing is essential to determine the success of prophylaxis and the absence of HBsAg. Local PHBPP coordinators assure that follow up serology is obtained when the high risk infant is 9-18 months of age (generally at the next well-child visit). This is to identify the 5% of vaccinated infants that do not develop immunity even after receiving three doses of hepatitis B vaccine, and also to determine if the infant is one of the 6% born to HBsAg-positive women who become infected despite proper prophylaxis. Either of these outcomes warrants additional interventions for re-vaccination or medical management of hepatitis B virus infection.

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### ***epiTRENDS* Monthly Posting Alert**

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### **Perinatal Hepatitis B Case Definition:**

**Any infant age 1-24 months who is born in the US or in US territories to an HBsAg-positive mother and is found to be HBsAg-positive.**

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### **Reporting Perinatal Hepatitis B**

In Washington State, HBsAg-positive infants are reportable as acute hepatitis B virus infections. Unlike acute hepatitis reporting for older children or adults, perinatal hepatitis B cases are reportable even if they have no symptoms (see case definition). Health care providers, labs, and hospitals are legally required to report to the local health departments according to Washington Administrative Code (WAC) 246-101-101. Health care providers should report when follow-up testing of the infant is completed. When the mother of a high risk infant has been enrolled in the PHBPP, reporting test results to the PHBPP coordinator fulfills this requirement.

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If an infant is found to be HBsAg-positive, and therefore is infected with hepatitis B virus, the local PHBPP coordinator must relay this information to their communicable disease surveillance team so that it can be reported to Washington State Department of Health Communicable Disease Epidemiology Section using the electronic surveillance database known as PHIMS.

In addition, the local PHBPP coordinator reports the outcome of the pregnancy to the coordinator of the state's perinatal hepatitis B Program, part of the Immunization Program/CHILD Profile Section of the Washington State Department of Health.

Perinatal hepatitis B virus infection is one of more than 50 nationally notifiable conditions reported weekly from state health departments to the Centers for Disease Control and Prevention (CDC) through the Nationally Notifiable Diseases Surveillance System (NNDSS). The state PHBPP Coordinator and Communicable Disease Epidemiology Section collaborate to assure that information about each perinatal hepatitis B virus infection is received by the CDC's Perinatal Program as well as by the surveillance epidemiologists in the CDC's Hepatitis Branch.

Preventing perinatal transmission of hepatitis B means preventing a potentially fatal lifelong infection. In addition to reporting acute and newly diagnosed chronic cases of hepatitis B, health care providers should remember to report **each** pregnancy in an HBsAg-positive woman to the local health jurisdiction.

Local health jurisdictions should also assure that HBsAg-positive infants are reported to both of the appropriate Washington State Department of Health programs:

DOH Communicable Disease Epidemiology: 877-539-4344 or 206-418-5500

DOH Immunization Program CHILD Profile: 360-236-3595

For a table of Hepatitis B Reporting Requirements in Washington State, see page 5.

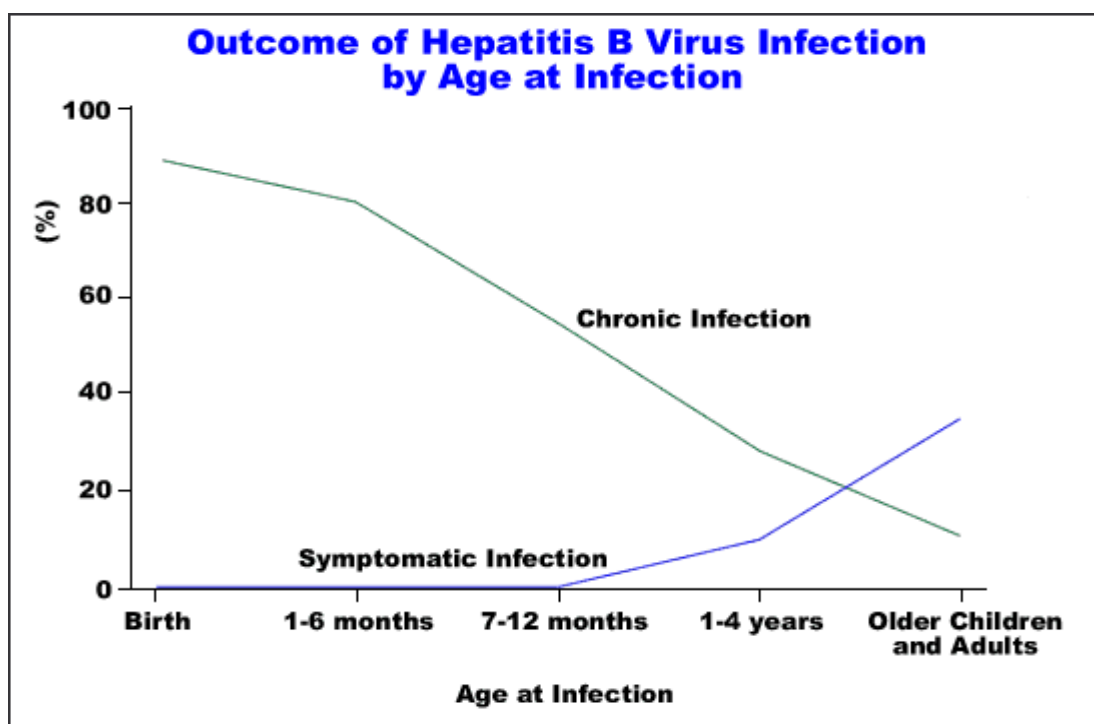
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## Online Resource for Health Care Workers

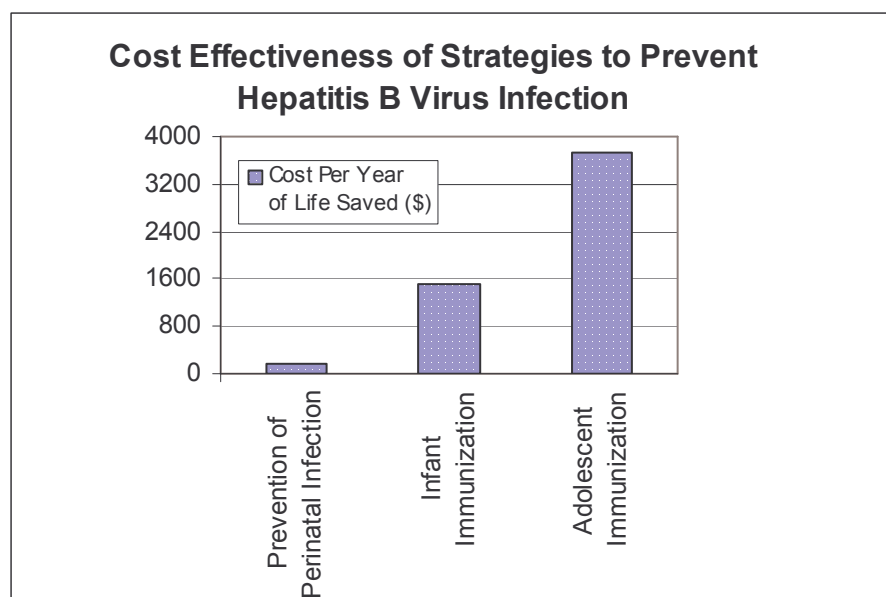
The Seattle STD/HIV Prevention Training Center and the University of Washington recently announced the release of Hepatitis Web Study: [www.hepwebstudy.org](http://www.hepwebstudy.org).

This site was designed for health care workers who provide clinical care to persons with viral hepatitis and features case studies, free Continuing Education credit for physicians and nurses, figures to download as PowerPoint slides, and links to references.

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Without appropriate preventive measures, up to 90% of persons infected with hepatitis B virus at birth go on to develop chronic infection; therefore, it is crucial to identify HBsAG-positive pregnant women in order to implement timely intervention strategies for their newborn infants.



The earlier in life hepatitis B virus prevention strategies are initiated, the more cost effective they are.

- Images and data courtesy of the Centers for Disease Control and Prevention (CDC) -

## HEPATITIS B REPORTING REQUIREMENTS

	Health Care Providers	Hospitals	Laboratories	Department of Corrections	Local Health Jurisdictions
	Report to Local Health Jurisdiction	Report to Local Health Jurisdiction	Report to Local Health Jurisdiction	Report to DOH - locations listed below	Report to DOH - locations listed below
				Within 7 days of case investigation completion, or summary information required within 21 days	Within 7 days of case investigation completion, or summary information required within 21 days
<b>Acute</b>	Within 3 working days	Within 3 working days	Within 1 month	Communicable Disease Epidemiology	Communicable Disease Epidemiology
Pregnancy in HBV surface antigen + women, <i>each pregnancy</i>	Within 3 working days	Within 3 working days	Within 1 month	Immunization Program	Immunization Program
Perinatal Hepatitis B *	Within 3 working days of receiving test result	Within 3 working days of receiving test result	Within 1 month	Communicable Disease Epidemiology	Communicable Disease Epidemiology & Immunization Program
Chronic	Within 1 month	Within 1 month	Within 1 month	Infectious Disease & Reproductive Health	To DOH through PHIMS

\* Perinatal Hepatitis B is defined as a child:

- 1) under 24 months of age
- 2) born to a Hepatitis B surface antigen positive (HBsAg+) mother who
- 3) tests positive for HBsAg

\* These infants are reported as acute Hepatitis B, even though most have no symptoms

**DOH Infectious Disease and Reproductive Health**  
PO Box 47838  
Olympia, WA  
98504-7838  
360-236-3440

**DOH Communicable Disease Epidemiology**  
1610 NE 150th Street  
Shoreline, WA 98155  
206-418-5500  
877-539-4344 (24 hr)

**DOH Immunization Program**  
PO Box 47843  
Olympia, WA  
98504-7843  
360-236-3595